

United States Patent and Trademark Office

W

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|---------------|----------------------|---------------------|------------------|
| 10/603,381 | 06/24/2003 | Matthew Grant Lopez | 200209588-1 2838 | |
| 75 | 90 08/10/2004 | EXAMINER | | |
| HEWLETT-PACKARD COMPANY | | | HANIG, RICHARD E | |
| Intellectual Property Administration P.O. Box 272400 | | | ART UNIT | PAPER NUMBER |
| Fort Collins, Co | * | | 2873 | |

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | |
|---|--|----------------------|--------------|--|--|--|
| Office Action Summary | | 10/603,381 | LOPEZ ET AL. | | | |
| | | Examiner | Art Unit | | | |
| | | Richard Hanig | 2873 | | | |
| | The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) | Responsive to communication(s) filed on | | | | | |
| 2a) <u></u> ☐ | This action is FINAL . 2b)⊠ This | action is non-final. | | | | |
| 3)□ | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Dispositi | Disposition of Claims | | | | | |
| 4) ☐ Claim(s) 1-24 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-24 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Applicati | on Papers | | | | | |
| , | The specification is objected to by the Examine | | | | | |
| 10)⊠ | The drawing(s) filed on 24 June 2003 is/are: a | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| 11)[| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority (| under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notice 3) Information | ce of References Cited (PTO-892) be of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date <u>06/24/03</u> . | Paper No(s)/Mail Da | | | | |

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehead et al (2004/0095558). For claims 1, 6, 17, 21, 22, Whitehead et al disclose a high range display device that has a first spatial light modulator (SLM) array that has pixels and adjusts for color and a second SLM that modulates the light from the first SLM (see sections [0010, 0029, 0049] and claims 11, 14, 26), but, their dynamic range is a ratio which is different than the claimed 'luminescence output' parameter, however, it would have been obvious to one of ordinary skill in the art to convert to a different type of scale of luminosity depending on the amount and fine tuning that is required for the system. The alignment and filtering of the first array of pixels with respect to the second array of pixels is an obvious design choice that improves the images final projected resolution.
- 3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Blackham et al (5978142) discloses to SLM's right after each other where optical enhancement of brightness and contrast is achieved by a driving signal to the second modulator (see col. 2, lines 42-56).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Hanig whose telephone number is 571-272-2329. The examiner can normally be reached on M-F: 8:00-4:30.

Art Unit: 2873

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

08/04/oif

Scott J. Sugarman Primary Examiner Page 3